PREFACE

Field Manual (FM) 5-430 is intended for use as a training guide and reference text for engineer personnel responsible for planning, designing, and constructing roads, airfields, and heliports in the theater of operations (TO).

FM 5-430 is divided into two separate volumes to make it more *user-friendly*. FM 5-430-00-1/AFPAM 32-8013, Vol 1, *Road Design*, encompasses Chapters 1 through 9 and Appendices A through H. FM 5-430-00-2/AFJPAM 32-8013, Vol II, *Airfield and Heliport Design*, encompasses Chapters 10 through 14 and Appendices I through P.

FM 5-430-00-1/AFPAM 32-8013, Vol 1 is a *stand-alone* volume for the design of TO roads. This volume also serves as a detailed description of information common to both roads and airfields, such as site selection, survey and earthwork, clearing and grubbing, base and subbase courses, and drainage.

FM 5-430-00-2/AFJPAM 32-8013, Vol II serves as the basis for airfield and heliport design. It discusses the complete process of airfield and heliport construction from the preliminary investigations, through design criteria, to the final project layout and construction techniques. It is not a *stand-alone* volume. FM 5-430-00-1/AFPAM 32-8013, Vol 1 contains much of the information required to design the substructure of an airfield or a heliport.

The material in this manual applies to all levels of engineer involvement in the TO. The manual is intended to be used by United States (US) Army Corps of Engineers personnel.

The provisions of this publication are the subject of the following international agreements:

 Quadripartite Standardization Agreement (QSTAG) 306, American-British-Canadian-Australian Armies Standardization Program, Fortification for Parked Aircraft.

- North Atlantic Treaty Organization (NATO) Standardization Agreement (STANAG) 3158 Airfield Marking and Lighting (AML) (Edition 4), Day Marking of Airfield Runways and Taxiways.
- STANAG 2929, Airfield Damage Repair.
- STANAG 3346 AML (Edition 4), Marking and Lighting of Airfield Obstructions.
- STANAG 3601 Air Transport (TN) (Edition 3), Criteria for Selection and Marking of Landing Zones for Fixed Wing Transport Aircraft.
- STANAG 3619 AML (Edition 2) (Amendment 2), *Helipad Marking*.
- STANAG 3652 AML (Amendment 3), Helipad Lighting, Visual Meteorological Conditions (VMC).
- STANAG 3685 AML, Airfield Portable Marking.

This publication applies to the Air National Guard (ANG) when published in the National Guard Regulation (NGR) (AF) 0-2.

This publication, together with FM 5-430-00-1/AFPAM 32-8013, Vol 1: Road Design (to be published), will supersede Technical Manual (TM) 5-330/Air Force Manual (AFM) 86-3, Volume II, 8 September 1968 anti FM 5-165/AFP 86-13, 29 August 1975.

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Unless this publication states otherwise, masculine nouns and pronouns do not refer exclusively to men.